

Notice of Allowability

Application No.

10/565,964

Examiner

Thai-Ba Trieu

Applicant(s)

ROGG ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/08/2007 and 09/21/2007.
2. ☒ The allowed claim(s) is/are 12-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>08/08/2007</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

This Office Action is in response to the Amendment filed on September 21, 2007.

Claims 1-11 were cancelled; claims 12, 24, and 31 were amended.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose or renders obvious the claimed combination of a circuit arrangement having a low-temperature circuit having a first low-pressure turbocharger; a second high pressure turbocharger; a first cooler provided downstream of the low-pressure turbocharger and upstream of the high-pressure turbocharger for cooling the charge air in a first cooling stage; a second cooler provided downstream of the high-pressure turbocharger and upstream of the engine for cooling the charge air in a second cooling stage, wherein the second cooler comprises a high-pressure charge air/air cooler; and comprising:

" Regarding claim 12:

a third cooler, wherein the third cooler is a low-temperature cooler configured such that low-temperature coolant from the first cooler flows through the low-temperature cooler, wherein the high-pressure charge air/air cooler is arranged alongside the low-temperature cooler and, seen in a direction of air flow of cooling air, upstream of a main coolant cooler.

Regarding claim 19:

a third cooler, wherein the third cooler and the second cooler form a cooling module, wherein a front face of the third cooler takes up 20% to 50% of a

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total front surface of the cooling module, wherein the low-temperature circuit is part of an engine cooling circuit.

Regarding claim 24:

a third cooler that receives coolant from the low-pressure charge air/coolant cooler, whereto the high-pressure charge air/air cooler is configured to use air flow of cooling air in a main cooling circuit upstream of a main coolant cooler as seen in a direction of the air flow of the cooling air.

Regarding claim 31:

cooling the charge air in a first cooling stage using a low-pressure charge air/coolant cooler provided downstream of the low-pressure turbocharger and upstream of a second high-pressure turbocharger, wherein coolant from the low-pressure charge air/coolant cooler flows into a coolant/air cooler."

Conclusion

The IDS (PTO-1449) filed on August 08, 2007 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Haase (Patent Number 6,848,397 B2) discloses a cooling system for an engine having indirect charge air-cooling.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB
September 26, 2007



Thai-Ba Trieu
Primary Examiner
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